

What is claimed is:

1. A broadcasting system for receiving a plurality of programs from different programming sources comprising:

a plurality of first receivers receiving the plurality of programs as analog and digital signals;

a master control unit coupled to the plurality of receivers, the master control unit comprising an analog to digital converter, a storage server, a plurality of playback stations, compression and encryption processors, a multiplexer and a control unit, the control unit adapted to provide programming instructions to store, process, compress, encrypt, monitor and generate an output signal comprising the plurality of programs in a predetermined format; and

a transmitter coupled to the master control unit transmitting the output signal to a plurality of second receivers,

wherein the master control unit continues monitoring the output signal after being received by the plurality of second receivers and the output signal provides comprising a combination of the plurality of programs received from different programming sources in a single channel.

2. The broadcasting system, as recited in claim 1, wherein the analog to digital converter is coupled to the plurality of receivers and converts the plurality of programs received as analog signals to digital signals.

3. The broadcasting system, as recited in claim 2, wherein the storage server is a multi-channel audio/video server for storing the digital signals.

4. The broadcasting system, as recited in claim 3, wherein the storage server is coupled to the analog to digital converter, the storage server being

configured to store the digital signals received from the analog to digital converter.

5. The broadcasting system, as recited in claim 1, wherein the plurality of playback stations are used to edit, monitor, format, and position the plurality of programs in a single channel for the output signal.

6. The broadcasting system, as recited in claim 1, wherein the master control unit further comprises a digital router coupled to each one of the plurality of playback stations, storage server, the analog-to-digital converter, compression and encryption processors and the multiplexer for routing the digital signals.

7. The broadcasting system, as recited in claim 6, wherein the digital router is controlled and monitored by the control unit.

8. The broadcasting system, as recited in claim 1, wherein the compression and encryption processors are coupled to the playback stations the storage server, the multiplexer, and the digital router, the compression and encryption processors compress and encrypt the digital signals received from the playback stations or the storage server and transmit the compressed and encrypted signal to the multiplexer.

9. The broadcasting system, as recited in claim 7, wherein the multiplexer multiplexes the digital signals and outputs the output signal to the transmitter.

10. The broadcasting system, as recited in claim 9, wherein the control unit operably coupled to the transmitter monitors the output signal received by the plurality of second receivers.

11. The broadcasting system, as recited in claim 1, wherein the transmitter is a satellite uplink-transmitter.

12. The broadcasting system, as recited in claim 1, wherein the broadcasting system is located in a single central facility.

13. The broadcasting system, as recited in claim 1, wherein the broadcasting system is automated.

14. The broadcasting system, recited in claim 1, wherein the broadcasting system is manually operated.

15. A broadcasting method comprising the steps of:

receiving a plurality of programs from different programming sources in a plurality of first receivers coupled to a master control unit, the plurality of programs received in the master control unit are received as analog or digital signals;

converting the analog signals to digital signals;

storing the digital signals;

routing the digital signals to a multi-channel video server and a plurality of playback stations based on a programming format;

processing the digital signals received from different programming sources according to the programming format controlled by a control unit;

compressing and encrypting the processed digital signals;

transmitting a single output signal comprising the processed digital signals according to the programming format to a plurality of second receivers; and

monitoring the plurality of programs received in the master control unit and the single output signal transmitted from the master control unit.

16. A broadcasting method, as recited in claim 15, wherein the step of receiving the plurality of programs further comprises the step of monitoring the plurality of programs received from the different programming sources.

17. The broadcasting method, as recited in claim 15, wherein the step of converting analog signals to digital signals comprises the step of transmitting

the digital signals from an analog to digital converter to a multi-channel video server.

18. The broadcasting method, as recited in 17, further comprises storing the digital signals in the multi-channel video server, the multi-channel video server being coupled to the analog-to-digital converter.

19. The broadcasting method, as recited in claim 15, wherein the step of routing the digital signals further comprises the step of controlling the routing of the digital signals through a digital router coupled to the plurality of first receivers, the analog-to-digital converter, the multi-channel video server, the plurality of playback stations, compression and encryption processors, and a multiplexer.

20. The broadcasting method, as recited in claim 15, wherein the step of processing of the digital signals is automated.

21. The broadcasting method, as recited in claim 20, wherein the step of processing further comprises the step of preparing the predetermined programming format using the plurality of playback stations controlled by the control unit.

22. The broadcasting method, as recited in claim 21, wherein the step of processing the digital signals further comprises multiplexing the digital signals received from the plurality of playback stations to output the single output signal.

23. The broadcasting method, as recited in claim 15, wherein the step of transmitting further comprises transmitting the single output signal through an uplink-transmitter to the plurality of second receivers.

24. A master control unit coupled to a plurality of receivers and a transmitter, the master control unit being adapted to receive a plurality of programs from different programming sources comprising:

digitizing means for converting analog signals to digital signals;
storing means for storing the digital signals;
processing means for editing and formatting the digital signals;
compressing and encryption means for compressing and encrypting
the digital signals;
multiplexing means for multiplexing the digital signals received from the
processing means and outputting a single output signal; and
control means for monitoring, routing and processing the digital signals
based on a predetermined format.

25. The master control unit, as recited in claim 24, wherein the digitizing means is an analog to digital converter.

26. The master control unit, as recited in 24, wherein the storing means is a multi-channel audio/video server.

27. The master control unit, as recited in claim 26, wherein the analog to digital converter transmits the digital signals to the multi-channel audio/video server.

28. The master control unit, as recited in claim 24, wherein the processing means includes monitoring, editing, formatting, and scheduling the digital signals in a plurality of playback stations.

29. The master control unit, as recited in claim 28, wherein the plurality of playback stations is controlled by the control means.

30. The master control unit, as recited in claim 29, wherein the control means controls traffic of the plurality of programs and formatting of the plurality of programs.

31. The master control unit, as recited in claim 15, wherein the control means is automated.

32. The master control unit, as recited in claim 15, wherein the control means is manually operated.

33. A master control unit operably coupled to a plurality of first receivers for receiving programming feeds from a plurality of programming sources, and a transmitter for outputting a processed programming signal to a plurality of second receivers, the master control unit comprising:

- a plurality of input storage devices for storing the programming feeds received from the plurality of receivers as analog and digital signals;

- an analog-to-digital converter coupled to the plurality of input storage devices for converting the analog signals to digital signals;

- a digital router coupled to the plurality of input storage devices and the analog-to-digital converter for routing the digital signals stored in the plurality of input storage devices and the digital signals received from the analog-to-digital converter;

- at least one storage server coupled to the digital router for storing the digital signals;

- a plurality of playback stations coupled to the at least one storage server and the digital router for formatting and editing the digital signals according to predetermined programming format;

- at least one compression/encryption processor coupled to the digital router and the plurality of playback stations for compressing and encrypting each one of the digital signals processed by the plurality of playback stations;

- at least one multiplexer coupled to the at least one compression/encryption processor for multiplexing the digital signals and outputting a single output and transmitting the output single to the transmitter;
- and

- at least one control unit coupled to the plurality of input storage devices, the analog-to-digital converter, the digital router, the at least one storage server, the plurality of playback stations, the at least one compression/encryption processor and the at least one multiplexer, the at least one control unit configured to monitor, control and process all analog and digital signals transmitted through the master control unit.

34. The master control unit, as recited in claim 33, wherein the plurality of input storage devices is at least one of video tape recorder, very small aperture terminal, a compact disk, and a digital versatile disk.

35. The master control unit, as recited in claim 33, wherein the programming feeds are received in the master control unit through at least one of satellite downlink transmission, cable, compact disk, digital versatile disk and videotape.

36. The master control unit, as recited in claim 33, wherein the storage server is a multi-channel audio/video server.

37. The master control unit, as recited in claim 33, wherein the master control unit is located in single central facility.

38. The master control unit, as recited in claim 33, wherein the master control unit is manually operated.

39. The master control unit, as recited in claim 33, wherein the master control unit is automated.

40. A broadcasting system for receiving a plurality of programs from different programming sources comprising:

- a plurality of first receivers receiving the plurality of programs as analog and digital signals;

- a master control unit coupled to the plurality of receivers, the master control unit comprising:

- an analog-to-digital converter coupled to the plurality of receivers, for converting the analog signals to digital signals;

- a multi-channel server coupled to the analog-to-digital converter and the plurality of receivers, the multi-channel server storing the digital signals received by the plurality of first receivers and the digital signals transmitted from the analog-to-digital converter;

a plurality of playback stations coupled to the multi-channel server and the analog to digital converter, edit, monitor, format, and position the plurality of programs according to a predetermined programming format;

compression and encryption processors coupled to the plurality of playback stations, compress and encrypt digital signals received from each one of the plurality of playback stations;

a multiplexer coupled to the compression and encryption processors multiplexes the digital signals received from the compression and encryption processors;

a control unit adapted to provide programming instructions to store, process, compress, encrypt, monitor and generate an output signal comprising the plurality of programs in the predetermined programming format;

a digital router coupled to the analog-to-digital converter, to each one of the plurality of playback stations, the compression and encryption processors and the multiplexer for routing the digital signals; and

a satellite uplink-transmitter coupled to the master control unit for transmitting an output signal to a plurality of second receivers; and

wherein the control unit monitors the output signal received by the plurality of second receivers and the output signal provides a plurality of processed programs in a single channel.

41. A broadcasting method comprising the steps of:

receiving a plurality of programs from different programming sources in a plurality of first receivers coupled to a master control unit, the plurality of programs received in the master control unit as analog or digital signals;

converting the analog signals to digital signals;

transmitting the digital signals from an analog to digital converter to a multi-channel video server;

storing the digital signals in the multi-channel video server;

routing the digital signals to a multi-channel video server and a plurality of playback stations based on a predetermined programming format;

controlling the routing of the digital signals through a digital router coupled to the plurality of first receivers, the analog-to-digital converter, the multi-channel video server, the plurality of playback stations, compression and encryption processors, and a multiplexer;

processing the plurality of programs in a master control unit through the programming format provided by a control unit, and preparing the predetermined programming format using the plurality of playback stations;

compressing and encrypting the processed digital signals received from the plurality of playback stations;

multiplexing the compressed and encrypted digital signals to output a single output signal;

transmitting the single output signal through an unicast-transmitter comprising the processed digital signals according to the predetermined programming format to a plurality of second receivers; and

monitoring the plurality of programs received in the master control unit and the single output signal transmitted from the master control unit.